



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

*Jim Gibbons, Governor*

*Allen Biaggi, Director*

*Leo M. Drozdoff, P.E., Administrator*

## NOTICE OF PROPOSED ACTION

December 19, 2007

by the  
State of Nevada  
Division of Environmental Protection  
Bureau of Air Pollution Control

Pursuant to Nevada Revised Statutes (NRS) Chapter 445B, the Nevada Administrative Code (NAC) Chapter 445B, and the Clean Air Act, the Division of Environmental Protection is issuing the following notice.

The Administrator received an application to issue an **Operating Permit to Construct #AP3241-2201 (FIN #A0030)** for a Class I facility from the following applicant:

Nevada Cement Company  
P.O. Box - 840  
Fernley, NV 89408-0840

The project is located in western Nevada, approximately 3.5 miles northwest of Fernley, Nevada in Lyon County. The Administrator has prepared tentative determinations regarding the operating permit that, in brief, are the following:

- X Portland cement manufacturing plants and associated coal/coke and finish mill feed storage and handling operations.
- X Construction of a new single kiln with five-stage preheater will replace the existing Portland Cement Manufacturing facility.
- X No emissions increase above baseline actual emissions exceed Prevention of Significant Deterioration significant thresholds.
- X The emissions from the facility will be 184.77 tons/yr of PM<sub>10</sub> emissions, 205.95 tons/yr of PM emissions, 2,374.31 tons/yr of NO<sub>x</sub> emissions, 224.51 tons/yr of CO emissions, 189.50 tons/yr of SO<sub>2</sub> emissions, 60.57 tons/yr of VOC emissions and 95.37 tons/yr of HAPs.
- X Adverse ambient air quality impacts are not expected. Nevada Cement Company (NCC) performed a dispersion modeling analysis using the air quality model, AERMOD (American Meteorological Society/EPA Regulatory Model, Version 07026) model to assess the ambient air quality impacts of PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs (ozone), and lead (Pb). NCC indicated that AERMOD code compiled with the Intel Fortran compiler (Version 9.1) produces executable code that runs approximately twice as fast on NCC's consultant's Xeon processor-based machines than the EPA-compiled code available on the SCRAM web page. To finish all model runs in a reasonable amount of time (less than one week), NCC modified the EPA-compiled code and model runs were made using Intel-compiled code. NCC indicated that two sets of code modifications were made (copy of NCC's letter is available for review upon written request). Modifications were made only to WRITE and FORMAT statements, not to any model computations. (1) A minor change was made to a FORMAT statement to eliminate improper

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form-feeds in the output files produced by Version 07026; and (2) Minor modifications were made to one WRITE and one FORMAT statement to enable output of source group contributions using the MAXIFILE option. These changes were made simply to enhance post-processing of the results. The following table lists the AERMOD modules that were modified by NCC.

Code Change	Model Source File Name	Subroutine Name
Eliminate improper form-feeds in model output file	AERMOD.FOR	HEADER
Print source group contributions to MAXIFILE	CALC2.FOR	MAXFIL
	SETUP.FOR	VARINI

NCC compiled AERMOD-ready surface and profile data files for 1998 through 2001 at the Sierra Pacific Power Company Tracy Generating Station located approximately 23 km west-southwest of Fernley. Additional National Weather Service surface and upper air data collected at Reno was also included. NCC applied a 45 degree clockwise rotation (i.e., WDROTATE keyword) to the modeled meteorological dataset with respect to the Tracy Generating Station wind rose. NCC indicated that rotated Tracy winds data was used based on technical grounds and to align the data with local observations. This resulted in more conservative modeled impacts (re: NCC's letter dated November 9, 2007). NCC also conducted test model runs in late May 2006 using both rotated and un-rotated Tracy winds data. Tests were conducted only for short-term PM<sub>10</sub> impacts. The results of those tests showed that High-first-high modeled PM<sub>10</sub> impacts using rotated Tracy winds were about 9% higher than impacts using un-rotated Tracy winds (re: NCC's letter dated November 9, 2007).

NDEP-BAPC used the EPA regulatory version of AERMOD (Version 5.6.0) to verify NCC's impact results based on Intel-compiled code. No substantial difference of impacts was noted. NDEP-BAPC compared regulatory model versus NCC's recompiled model results. Additionally, NDEP-BAPC ran the unrotated Tracy meteorological data to compare impacts with NCC's model. Based on NCC's model and NDEP-BAPC's confirmatory models, the proposed OPTC impacts do not exceed the National Ambient Air Quality Standards.

On the basis of the preliminary review and the requirements of the NRS, the NAC and the Clean Air Act the Administrator is hereby announcing his intent to issue a Class I air quality operating permit to construct based on a review of the information, as proposed. A copy of the **proposed** operating permit to construct is available for public inspection at:

Lyon County Library  
Fernley Branch  
575 Silver Lace Blvd  
Fernley, Nevada 89408

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Persons wishing to comment upon the proposed determinations by the Administrator regarding this proposed action or to request a hearing pursuant to NRS 445B Air Pollution and NAC 445B Air Controls should submit their comments or request in writing either in person or by mail or fax within thirty (30) days to:

Tobarak Ullah, P.E.  
Nevada Division of Environmental Protection  
Bureau of Air Pollution Control  
901 South Stewart Street, Suite 4001  
Carson City, Nevada 89701-5249  
(775) 687-9341  
(775) 687-6396 FAX

The application, proposed operating permit to construct, any comments received, and other relevant information may be copied at the above address or copies may be obtained by requesting in writing at the above address. Written comments or objections, will be received at the Nevada Division of Environmental Protection, above address, until January 28, 2008, and will be retained and considered prior to final action on the Class I operating permit to construct. Upon a valid written request received prior to the end of the comment period, the Administrator will schedule a public hearing on the application and proposed action.

Please bring the foregoing notice to the attention of all persons whom you know may be interested in this matter.